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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/945,200	08/30/2001	Martin Morris	WIDC-008/00US	4498

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Kevin J. Zimmer
Cooley Godward LLP
Five Palo Alto Square
3000 El Camino Real
Palo Alto, CA 94306-2155

EXAMINER	
BURD, KEVIN MICHAEL	
ART UNIT	PAPER NUMBER
2631	

DATE MAILED: 06/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/945,200	MORRIS, MARTIN	
	Examiner	Art Unit	
	Kevin M. Burd	2631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 April 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,8-15,17-21 and 25-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,8-15,17-21 and 25-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. This office action, in response to the amendment filed 4/5/2005, is a non-final office action.

Response to Arguments

2. Applicant's arguments, see pages 10 and 11, filed 4/5/2005, with respect to the rejections of claims 1-33 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, new grounds of rejection is made in view of Haartsen (US 2002/0187799) in view of Ho (US 2002/0034172) further in view of the instant application's disclosed prior art.

Claim Objections

3. Claim 1 is objected to because of the following informalities: the term "the second wireless device" in line 12 should be changed to "a second wireless device". Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-6, 8-15, 17-21 and 25-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haartsen (US 2002/0187799) in view of Ho (US 2002/0034172) further in view of the instant application's disclosed prior art.

Regarding claims 1, 8, 12, 17, 18, 21, 27, 30, 32 and 33, Haartsen discloses a wireless communication device and method of using a wireless communication device (abstract). A receiver is operable to receive an incoming transmission (paragraph 0064). A transmitter is operable to send an outgoing transmission over a first range (paragraph 0063). An error correction coding circuit is provided to vary the level of the error correction coding applied to the data within the outgoing transmission (paragraphs 0061 and 0063). The describe link adaptation scheme of altering the coding rate may be used to automatically adjust communication link parameters to provide a desired range (paragraph 0058).

Haartsen does not disclose a portion of the outgoing transmission is reserved to notify a second wireless device of a change in the level of error correction coding. Ho discloses, in figure 1B, a FEC value 114 is transmitted and provides information on the forward error correction scheme (paragraphs 0086 and 0093). This allows the second wireless device to know the level of coding for the FEC fields 310 and 412 (paragraph 0093) and allows the error correction to begin immediately. It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Ho into the wireless method and device of Haartsen for the reason stated above.

The combination of Haartsen and Ho do not disclose the reserved portion of the transmission is found in a dedicated inquiry access codes (DIAC). The instant

application's disclosed prior art states according to the Bluetooth specification, DIACs are specifically chosen to tolerate a higher bit error rate than a body of a message, such that they can be detected beyond a range at which a Bluetooth transmission normally would be corrupted (paragraph 1027). For this reason, it would have been obvious for one of ordinary skill in the art at the time of the invention to combine the DIAC of the instant application's disclosed prior art to contain the FEC value 114 of the combination of Haartsen and Ho.

Regarding claims 2-5, the receiver measures a performance parameter and sends information to the transmitter to change the user rate (coding rate) (Haartsen, paragraph 0017). The receiver will decode the following transmission at this new error correction-coding rate.

Regarding claim 6, the wireless communication system utilizes Bluetooth specifications for transmitting and receiving data (Haartsen, paragraph 0009).

Regarding claims 9, 26, 29 and 31, data transmitted following the Bluetooth specification has data comprising a digitally encoded data packet including an access code portion, a header portion and a payload portion.

Regarding claim 10, the describe link adaptation scheme of altering the coding rate described above may be used to automatically adjust communication link parameters to provide a desired range (paragraph 0058).

Regarding claims 11, 24 and 25, the FEC value 114 is received and indicates the level of coding for the FEC fields. This will show an increase, decrease or the same level of coding.

Regarding claims 13 and 14, a signal strength indicator is monitored in the receiver to determine if additional error correction coding is necessary (Haartsen, paragraph 0017) to increase the range of the transmission (paragraph 0058). A signal strength of zero would indicate the signal is not detected and a change to the error correction coding is necessary.

Regarding claim 15, symbols are re-encoded using the increased coding (Haartsen, paragraph 0042).

Regarding claims 19 and 20, the transmitting device searches for available receivers to receive the transmitted data.

Regarding claim 28, greater error correction coding capacity is included (Haartsen, paragraph 0041).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M. Burd whose telephone number is (571) 272-3008. The examiner can normally be reached on Monday - Thursday 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin M. Burd
6/15/2005

KEVIN BURD
PRIMARY EXAMINER